Customer No.: 31561
Docket No.: 11259-US-PA
Application No.: 10/604,822

AMENDMENT

To the Claims:

Please amend the claims according to the following listing of claims and substitute it for all prior versions and listings of claims in the application.

Claims 1-4. **(cancelled)**

Claim 5. (original) A driving method of a liquid crystal display comprising a back-light module and a liquid crystal display panel, wherein the liquid crystal display panel has a plurality of pixels, the driving method of the liquid crystal display comprising the steps of:

dividing a plurality of grayscale values 0, 1, 2, ..., N into a plurality of segments, where N is the highest grayscale of the image display system;

detecting a maximum grayscale X of all pixels in the present image;

adjusting output brightness of the back-light module to (Y / N) ×L, where Y is upper limit of one of the segments in which the maximum grayscale X is located, L is a corresponding output brightness of the back-light module to the grayscale N; and

adjusting a grayscale value Xa of each pixel to a mapping grayscale value Xb, and driving each of the pixels with the grayscale value Xb accordingly.

Claim 6. (original) The driving method of the liquid crystal display as recited in claim 5, wherein a mapping correlation between the grayscale value Xa and the grayscale value Xb is linear, and the mapping correlation is performed as Xb = (Xa / Y) ×N.

Claim 7. (original) The driving method of the liquid crystal display as recited in claim 5, wherein the mapping correlation between the grayscale value Xa and the grayscale value Xb is nonlinear.

Claim 8. (original) The driving method of the liquid crystal display as recited in claim 5, wherein the corresponding output brightness of the back-light module is retained when the grayscale maximum X is located in either a range between Y and Y + S or a range between Z – S and Z of a present image, where Z is lower limit of one of the segments in which segment the grayscale maximum X is located and S is the predetermined threshold.

Claim 9. (original) The driving method of the liquid crystal display as recited in claim 5, wherein each of the segments contains the same numbers of the grayscale values respectively.

Claim 10. (original) The driving method of the liquid crystal display as recited in claim 5, wherein each of the segments contains different numbers of the grayscale values respectively.

Claim 11. (original) The driving method of the liquid crystal display as recited in claim 5, wherein light transmittance of each of the pixels is adjusted by a bias voltage based on the grayscale value Xb.

Claim 12. (new) A driving method of a liquid crystal display comprising a back-light module and a liquid crystal display panel, wherein the liquid crystal display panel has a plurality of pixels, the driving method of the liquid crystal display comprising:

dividing a plurality of grayscale values 0, 1, 2, ..., N into a plurality of grayscale segments, where N is the highest grayscale of the image display system, thereby the

brightness of the back-light module is also divided into a plurality of values corresponding to the grayscale segments respectively;

detecting a maximum grayscale X of all pixels in the present image;

adjusting the output brightness of the back-light module to one of the plurality of values for the brightness of the back-light module, wherein the plurality of values are corresponding to the grayscale segments respectively; and

adjusting a grayscale value Xa of each pixel to a mapping grayscale value Xb, and driving each of the pixels with the grayscale value Xb accordingly.

Claim 13. (new) The driving method of the liquid crystal display as recited in claim 12, wherein a mapping correlation between the grayscale value Xa and the grayscale value Xb is linear, and the mapping correlation is performed as $Xb = (Xa / Y) \times N$, where Y is a upper limit of one of the segments in which the maximum grayscale X is located.